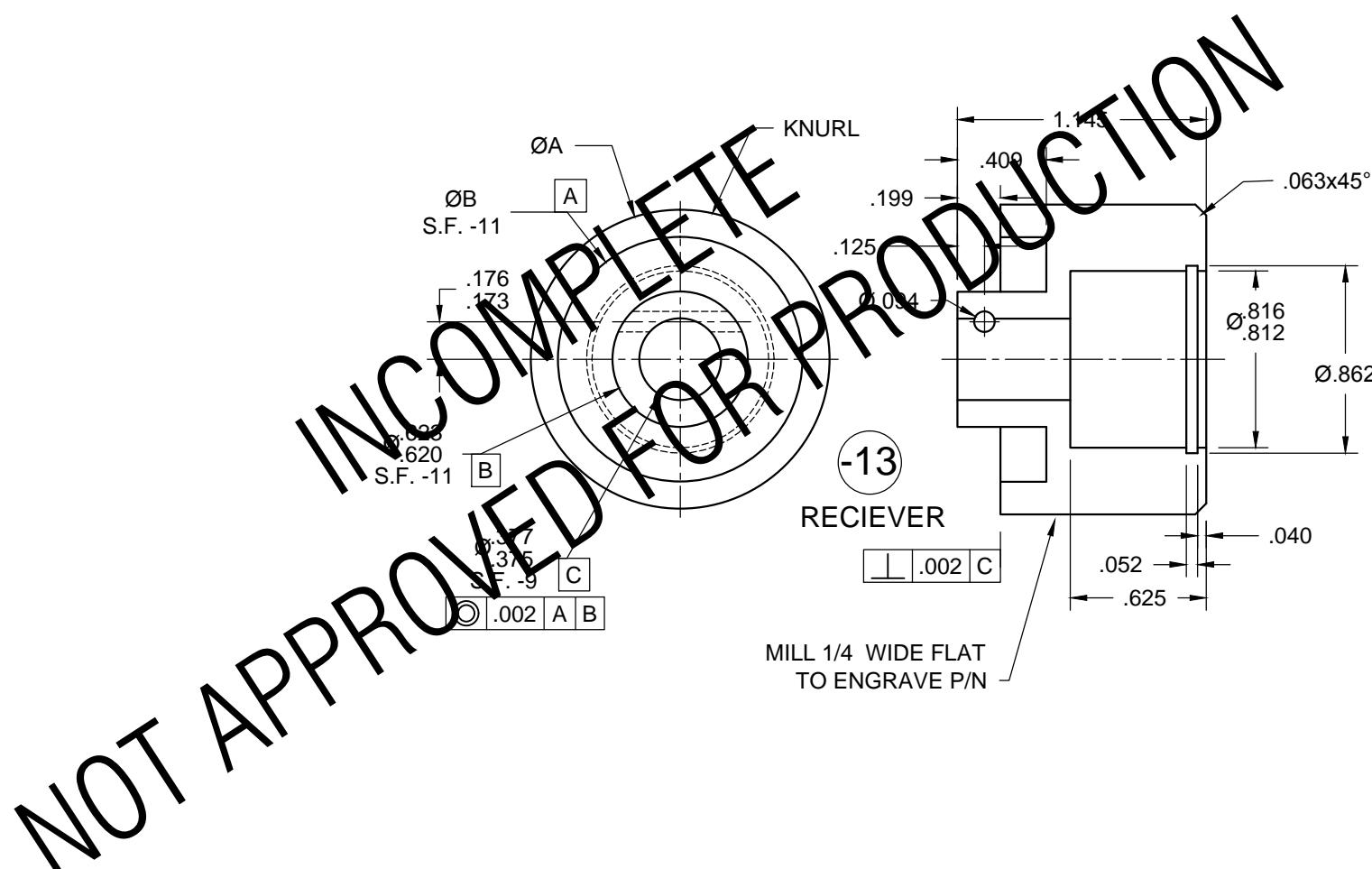


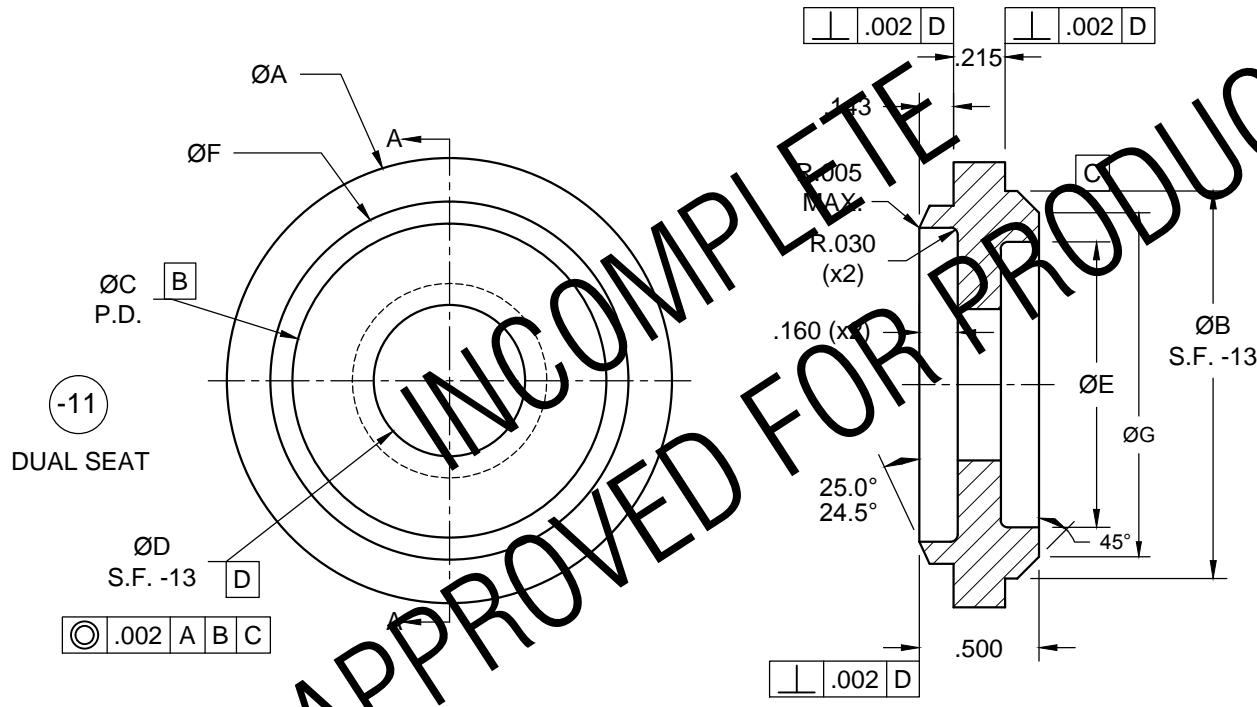
BEARING #	TOOL #	MATERIAL
BACB10FC	KSTBACB10FC SP	4140 Q&R RND. BAR Ø7/8 x 7/8

RED BARN MACHINE	
TITLE	
PORT. SWAGING TOOL; TENSIONER	
DWG NO.	TOOL#(see chart)-15
REV 3	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32	
.XX ± .01 ANGLES ± 5° X ± .1	
HEAT TREAT FINISH SPEC	
DRAWN BY: PERRITT APPROVED	
BLACK OXIDE	
USED ON BEARING	
SEE CHART	
SCALE	NTS
DATE	1-16-08
SHEET 9 of 9	



BEARING #	TOOL #	ØA +.010 -.010	ØB +.003 -.000	MATERIAL
BACB10FC	KSTBACB10FC SP	1.875	1.625	4140 Q&T RND.BAR Ø2 x 1-1/4

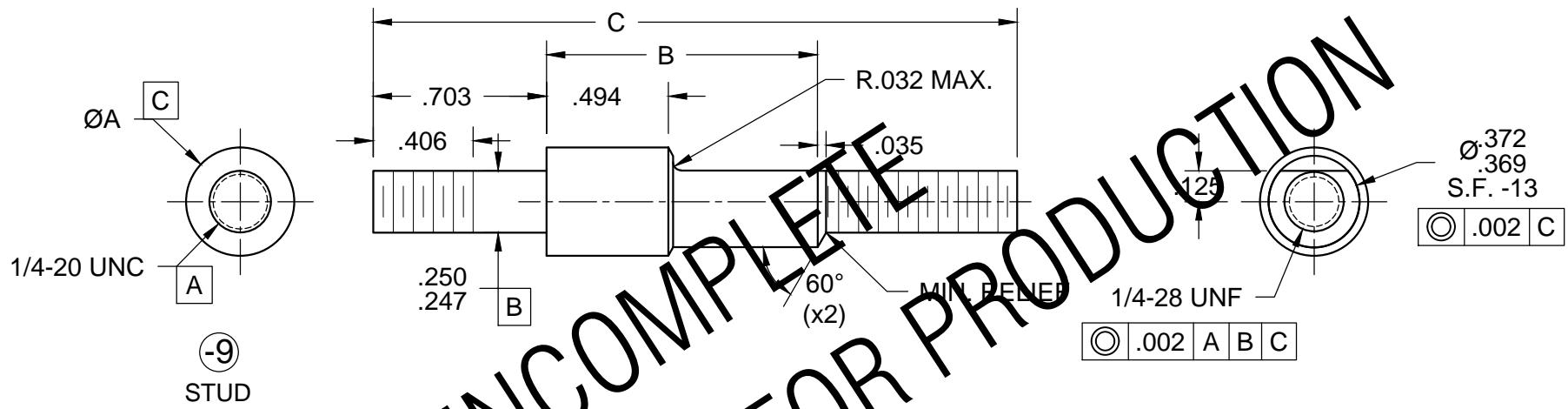
RB RED BARN MACHINE	
TITLE PORT. SWAGING TOOL; RECEIVER	
DWG NO. TOOL#(see chart)-13	REV 3
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS XXX \pm .005 FRACTIONS \pm 1/32	
XX \pm .01 ANGLES \pm 5°	
X \pm .1	
APPROVED	
HEAT TREAT	
FINISH SPEC	BLACK OXIDE
USED ON BEARING	
SEE CHART	
SCALE NTS	DATE 1-16-08
SHEET 8 of 9	



SECTION A-A

BEARING #	TOOL #	ØA +.010 -.020	ØB +.000 -.005	ØC +.002 -.000	ØD +.003 -.000	ØE +.005 -.005	ØF +.000 -.005	ØG +.000 -.002	MATERIAL
BACB10FC	KSTBACB10FC SP	1.860	1.560	1.313	1.125	1.193	1.496	1.437	REWORK SUPPLIED PART
									4140 Q&T RND. BAR Ø2 x 5/8

RB RED BARN MACHINE	
TITLE PORT. SWAGING TOOL; DUAL SEAT	
DWG NO.	TOOL#(see chart)-11
REV	3
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS	
XXX	+.005
XX	+.01
X	.1
FRACTIONS ± 1/32	
ANGLES ± 5°	
DRAWN BY: PERRITT	
APPROVED	
HEAT TREAT	
FINISH SPEC	BLACK OXIDE
USED ON BEARING	
SEE CHART	
UNLESS OTHERWISE SPECIFIED	
1. BREAK ALL SHARP EDGES	
.015 x 45° PR.015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS
DATE	1-16-08
SHEET	7 of 9



NOT APPROVED FOR PRODUCTION

BEARING #	TOOL #	ØA +.000 -.002	B +.010 -.010	C +.010 -.010	MATERIAL
BACB10FC	KSTBACB10FC SP	.743	1.250	2.625	4140 Q&T RND. BAR Ø3/4 x 2-7/8

RB RED BARN MACHINE	
TITLE PORT SWAGING TOOL; STUD	
DWG NO. TOOL#(see chart)-9 REV 3	
UNLESS OTHERWISE SPECIFIED DRAWN BY: PERRITT	
DIMENSIONS ARE IN INCHES APPROVED	
TOLERANCES ON: DECIMALS HEAT TREAT	
.XXX ± .005 FRACTIONS ± 1/32	
XX ± .01 ANGLES ± 5°	
X ± .1	
UNLESS OTHERWISE SPECIFIED	
1. BREAK ALL SHARP EDGES	
.015 x 45° PR. .015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS
DATE	1-16-08
SHEET 6 of 9	

NOT APPROVED FOR PRODUCTION

BEARING #	TOOL #	MATERIAL
BACB10FC	KSTBACB10FC SP	1018 RND. BAR Ø1 x 5/8

RB RED BARN MACHINE	
TITLE PORT. SWAGING TOOL; CAP	
DWG NO.	TOOL#(see chart)-7
REV	3
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS	
XXX	± .005
XX	± .01
X	± .1
FRACTIONS ± 1/32	
ANGLES ± 5°	
APPROVED	
HEAT TREAT	
FINISH SPEC BLACK OXIDE	
USED ON BEARING	
SEE CHART	
SCALE	NTS
DATE	1-16-08
SHEET	5 of 9

NOT APPROVED FOR PRODUCTION

ROLLER

$\varnothing .310$ to $.309$

$\varnothing .245$ REF.

$R.502$ to $.498$ SPHER

RC

$R.010$ to $.005$

B

BEARING #	TOOL #	A +.001 -.001	B +.002 -.002	RC +.002 -.000	MATERIAL
BACB10FC12	KSTBACB10FC12 SP	.286	.181	.094	.310 MINUS GAUGE PIN MSC #89031009

RB RED BARN MACHINE	
TITLE PORT. SWAGING TOOL; ROLLER	
DWG NO.	TOOL#(see chart)-5
REV	3
UNLESS OTHERWISE SPECIFIED	DRAWN BY: PERRITT
DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	APPROVED
DECIMALS	HEAT TREAT RC 55-60
XXX \pm .005	FRACTIONS \pm 1/32
XX \pm .01	FINISH SPEC
X \pm .1	USED ON BEARING
	SEE CHART
UNLESS OTHERWISE SPECIFIED	
1. BREAK ALL SHARP EDGES	
.015 x 45° PR.015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-16-08
	SHEET 4 of 9

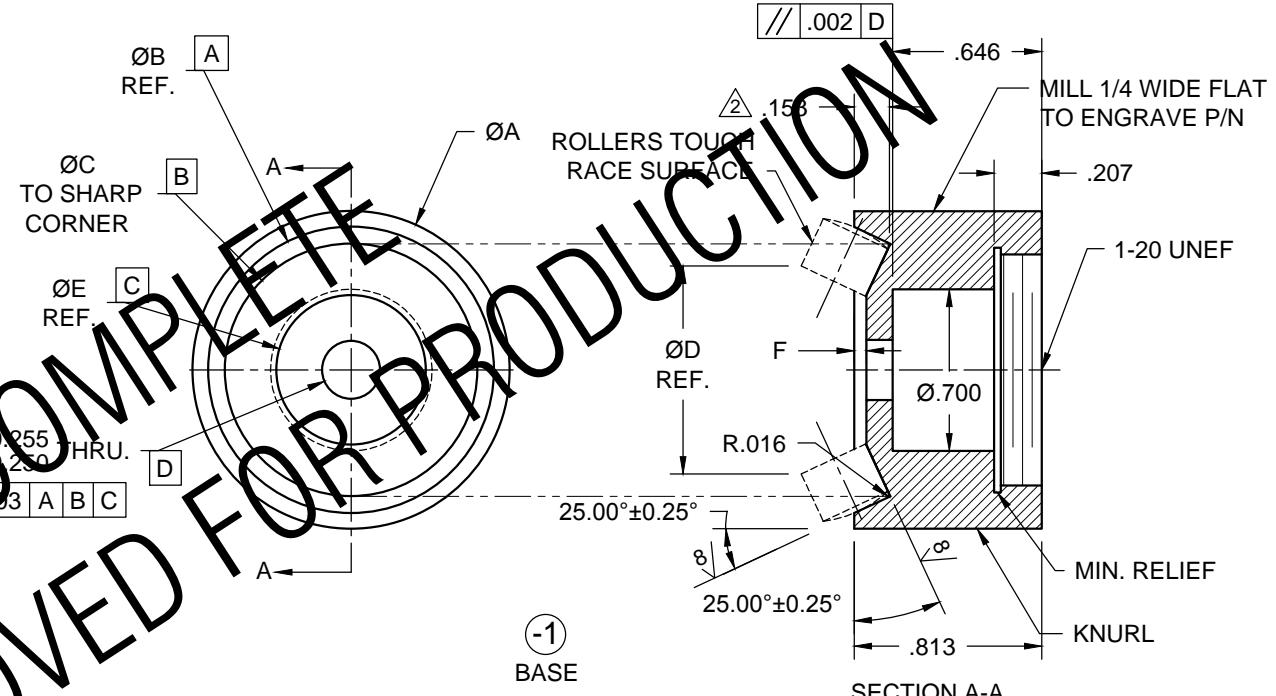
NOTES

BEARING #	TOOL #	ØA +.002 -.002	ØB +.010 -.000	C +.005 -.005	P.D. REF.	MATERIAL
BACB10FC12	KSTBACB10FC SP12	1.679	1.032	.286	1.313	REWORK SUPPLIED PART

 RED BARN MACHINE	
TITLE	
PORT. SWAGING TOOL; RETAINER	
DWG NO.	TOOL#(see chart)-3
REV 3	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS	
.XXX \pm .005	FRACTIONS \pm 1/32
.XX \pm .01	ANGLES \pm 5°
X \pm .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 0.15 x 45° PR. 016 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT	
APPROVED	
HEAT TREAT FINISH SPEC	
USED ON BEARING	
SEE CHART	
SCALE	NTS
DATE	1-16-08
SHEET 3 of 9	

NOTES

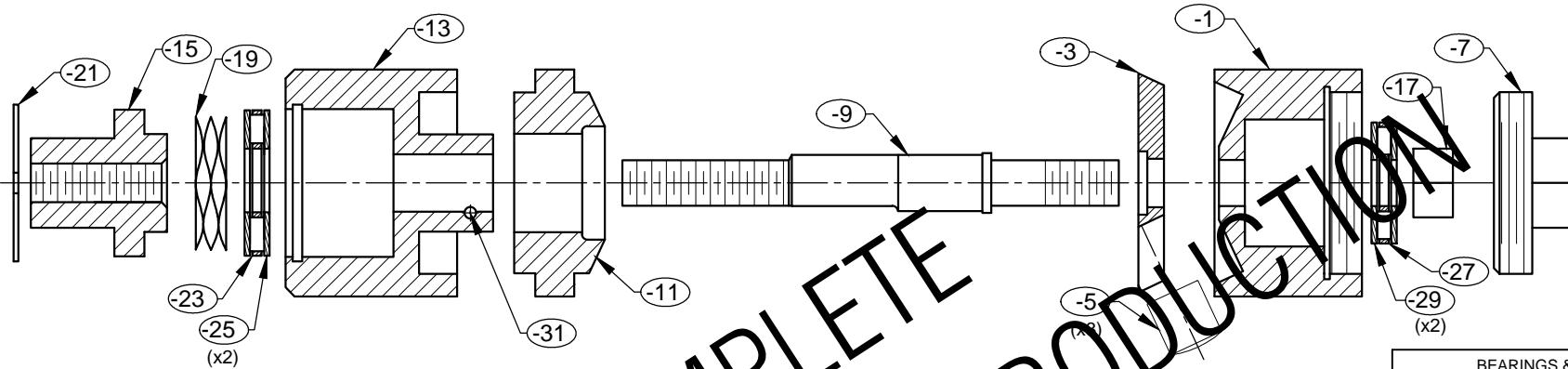
1. BREAK ALL SHARP CORNERS (.015/.03).
2. DIMENSION TO BOTTOM OF R.016=.153;
DIMENSION TO SHARP CORNER=.158.
3. RACE SURFACE OF -1 BASE MUST BE
SMOOTH AND FREE OF GROOVES &
MACHINING MARKS.
4. MUST HOLD ØC POSITION AND ANGLE
TOLERANCES TO MAINTAIN PITCH DIA..
5. DO FIRST ARTICLE INSPECTION
BEFORE HEAT TREATING.



BEARING #	TOOL #	ØA +.000 -.020	ØB +.006 -.002	ØC +.006 -.002	ØD P.D. REF.	ØE +.006 -.002	F +.003 -.003	MATERIAL
BACB10FC12	KSTBACB10FC12 SP	1.960	1.805	1.659	1.313	1.093	.025	O-1 DRILL ROD Ø2 x 7/8

RB RED BARN MACHINE	
TITLE PORT. SWAGING TOOL; BASE	
DWG NO.	TOOL #(see chart)-1
REV	3
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS	FRACTIONS $\pm 1/32$
XXX $\pm .005$	ANGLES $\pm .5^\circ$
XX $\pm .01$	
X $\pm .1$	
APPROVED	
HEAT TREAT	RC 55-60
FINISH SPEC	BLACK OXIDE
USED ON BEARING	
SEE CHART	
SCALE	NTS
DATE	1-16-08
SHEET	2 of 9

REV		DESCRIPTION		DATE	INITIAL	APPROVED
1	-			-	-	-



NOTES

- 5 ROLLERS AND -3 RETAINER MUST TURN SMOOTHLY ON -1 BASE WHEN ASSEMBLED.
- FLAT END OF -5 ROLLERS MUST FACE THE CENTER OF TOOL WHEN ASSEMBLED.

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	INFO	B/O INFORMATION OR SPECIFICATIONS	Pg.
			-1	1	BASE		SEE CHART	2
			-3	1	RETAINER		SEE CHART	3
			-5	3	ROLLER		SEE CHART	4
			-7	1	CAP		SEE CHART	5
			-9	1	STUD		SEE CHART	6
			-11	1	DUAL SEAT		SEE CHART	7
			-13	1	RECOVER		SEE CHART	8
			-15	1	TENSIONER		SEE CHART	9
B/O		-17	1		DISTORTED THREAD LOCK NUT	1/4-20 UNC x 7/32 Ht.	MCMASTER-CARR #95065A150	1
B/O		-19	1		CREST TO CREST FLAT WIRE WAVE SPRING	STEEL .750 OD., .550 ID., WIRE THICK. .013, THREE TURNS	SMALLEY RING CO. #CS075-H1	1
B/O		-21	1		INTERNAL SNAP RING	STEEL Ø7/8 BORE	MCMASTER-CARR #99142A410	1
B/O		-23	1		THRUST BEARING (SPRING SIDE)	STEEL Ø3/8 ID. x 13/16 OD. x 5/64 WIDTH	APPLIED (TIMKEN #NTA-613)	1
B/O		-25	2		BEARING WASHER	STEEL Ø3/8 ID. x 13/16 OD. x 1/32 WIDTH	APPLIED (TIMKEN #TRA-613)	1
B/O		-27	1		THRUST BEARING	STEEL Ø1/4 ID. x 11/16 OD. x 5/64 WIDTH	APPLIED (TIMKEN #NTA-411)	1
B/O		-29	2		BEARING WASHER	STEEL Ø1/4 ID. x 11/16 OD. x 1/32 WIDTH	APPLIED (TIMKEN #TRA-411)	1
B/O		-31	1		ROLL PIN	STEEL Ø3/32 x 3/8		N/S

 RED BARN MACHINE
PORTABLE SWAGING TOOL

DWG NO.	REV
SEE CHART ABOVE FOR TOOL No.	3
UNLESS OTHERWISE SPECIFIED	DRAWN BY: PERRITT
DIMENSIONS ARE IN INCHES	APPROVED
TOLERANCES ON:	HEAT TREAT SEE PART
DECIMALS XXX \pm .005	FINISH SPEC SEE PART
XX \pm .01	USED ON BEARING
X \pm .1	SEE CHART
UNLESS OTHERWISE SPECIFIED	
1. BREAK ALL SHARP EDGES .015 x 45° PR. .015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-16-08
	SHEET 1 of 9

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL APPR
—	—	—	—

NOT APPROVED FOR PRODUCTION

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MAT.	B/O INFORMATION OR SPECIFICATIONS	Pg.	TITLE					
			-1	1	RND	6061	Ø8-1/4 x 3-7/8	2	— —					
									DWG NO. — — RE					
									UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES					
									DRAWN BY: PERRITT					
									APPROVED					
									HEAT TREAT FINISH SPEC					
									USED ON MODEL					
ASSY #									SCALE	NTS	DATE	8-15-07	SHEET	1 of

NOT APPROVED FOR PRODUCTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

PART #	QTY	DESCRIPTION
-1	1	--

DRAWN BY: PERRITT	TITLE RED BARN MACHINE
CHECKED	
HEAT	
TREAT	
FINISH SPEC	
USED ON MODEL ?	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX \pm .005 FRACTIONS \pm 1/32 .XX \pm .01 ANGLES \pm 5° .X \pm .1
DWG NO.	PART #
SCALE NTS	DATE 1-28-06
REV.	SHEET 1 of 1